UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

26418

7590

08/06/2009

REED SMITH, LLP ATTN: PATENT RECORDS DEPARTMENT 599 LEXINGTON AVENUE, 29TH FLOOR NEW YORK, NY 10022-7650 EXAMINER

ENTEZARI, MICHELLE M

ART UNIT PAPER NUMBER

2624

DATE MAILED: 08/06/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565.748	01/24/2006	Burkhard Hahn	OEH-219/500814.20121	2677

TITLE OF INVENTION: METHOD FOR REDUCING COLOR MOIRE IN DIGITAL IMAGES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	11/06/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ar in m

ppropriate. All further adicated unless corrected international control of the co	correspondence includin d below or directed oth	g the Patent, advance or erwise in Block 1, by (a	rders and notification of a) specifying a new cor	f maintenance fees respondence addres	will be s; and/o	mailed to the current of the current	correspondence address as rate "FEE ADDRESS" for
	ENCE ADDRESS (Note: Use Blo	ock 1 for any change of address)	F	ee(s) Transmittal T	his certif	ficate cannot be used fo	domestic mailings of the or any other accompanying at or formal drawing, must
599 LEXINGTO	Γ RECORDS DEPA N AVENUE, 29TH	ARTMENT		Ce	rtificate	e of Mailing or Transn	
NEW YORK, N	Y 10022-7650						(Depositor's name)
							(Signature)
			L				(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO	OR .	ATTC	DRNEY DOCKET NO.	CONFIRMATION NO.
10/565,748 ITLE OF INVENTION	01/24/2006 : METHOD FOR REDU	CING COLOR MOIRE I	Burkhard Hahn IN DIGITAL IMAGES		ОЕН	-219/500814.20121	2677
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DU	E PREV. PAID ISS	JE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0		\$1810	11/06/2009
EXAM	INER	ART UNIT	CLASS-SUBCLASS				
ENTEZARI, M	IICHELLE M	2624	382-275000				
Change of correspondence address or indication of "Fee Address" (37 FR 1.363). Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			2. For printing on the (1) the names of up or agents OR, altern: (2) the name of a sin registered attorney c 2 registered patent a listed, no name will	to 3 registered pate atively, agle firm (having as r agent) and the nau ttorneys or agents. I be printed.	a memb	per a 2	
PLEASE NOTE: Unl recordation as set forth (A) NAME OF ASSIG	ess an assignee is identi n in 37 CFR 3.11. Comp GNEE	A TO BE PRINTED ON The fied below, no assignee eletion of this form is NO control of the form is NO control of the form is NO control of the form is not be presented in the form is not be pr	data will appear on the T a substitute for filing a (B) RESIDENCE: (CI	patent. If an assign assignment. TY and STATE OR	COUN	ΓRY)	ocument has been filed for up entity Government
a. The following fee(s) a Issue Fee Publication Fee (N		4b	o. Payment of Fee(s): (P A check is enclosed Payment by credit of The Director is here	lease first reapply : l. card. Form PTO-203	any prev 8 is atta	viously paid issue fee s ached. required fee(s), any def	hown above)
a. Applicant claims	t us (from status indicated s SMALL ENTITY statu	s. See 37 CFR 1.27.		-		TITY status. See 37 CF	-
OTE: The Issue Fee and terest as shown by the r	d Publication Fee (if requeecords of the United Sta	iired) will not be accepted tes Patent and Trademark	d from anyone other that Office.	n the applicant; a reg	gistered	attorney or agent; or the	e assignee or other party in
Authorized Signature				Date			
Typed or printed name			Registration No				
his collection of inform n application. Confident ibmitting the completed its form and/or suggesti ox 1450, Alexandria, V lexandria, Virginia 223	iality is governed by 35 I application form to the ons for reducing this bur irginia 22313-1450. DO	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary den, should be sent to the NOT SEND FEES OR (on is required to obtain of 1.14. This collection is depending upon the ine Chief Information Off COMPLETED FORMS	or retain a benefit by estimated to take 12 lividual case. Any c icer, U.S. Patent and TO THIS ADDRES	the pub minute commen I Trader SS. SEN	lic which is to file (and s to complete, including ts on the amount of tin mark Office, U.S. Depa D TO: Commissioner f	by the USPTO to process) g gathering, preparing, and the you require to complete rtment of Commerce, P.O. for Patents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/565,748 01/24/2006		Burkhard Hahn	OEH-219/500814.20121	2677		
26418 75	26418 7590 08/06/2009			EXAMINER		
REED SMITH, I	LP	ENTEZARI, M	MICHELLE M			
	RECORDS DEPARTM	ART UNIT	PAPER NUMBER			
599 LEXINGTON NEW YORK, NY	AVENUE, 29TH FLC	2624				
111111 101111, 111	10022 1030	DATE MAILED: 08/06/2000				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 90 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 90 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)					
Notice of Allowability	10/565,748 Examiner	HAHN, BURKHARD Art Unit					
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	LXammer	Art offic					
	MICHELLE ENTEZARI	2624					
The MAILING DATE of this communication appearance All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in the or other appropriate communication. This application is sub-	nis application. If not included cation will be mailed in due course. THIS					
1. This communication is responsive to 4/17/09.							
2. The allowed claim(s) is/are <u>11-20</u> .							
 3. Acknowledgment is made of a claim for foreign priority unally All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have 3. Note that the priority have 3. Note the priority have 3. Note the priority documents h	e been received. e been received in Application I	No					
International Bureau (PCT Rule 17.2(a)).							
* Certified copies not received:							
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		reply complying with the requirements					
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give							
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.						
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached							
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date	1) ☐ hereto or 2) ☐ to Paper No./Mail Date						
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date							
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t							
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT							
Attachment(s) 1. ☑ Notice of References Cited (PTO-892)	5. ☐ Notice of Infor	mal Patent Application					
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ☐ Interview Sum						
3. Information Disclosure Statements (PTO/SB/08),	Paper No./Ma 7.	ail Date nendment/Comment					
Paper No./Mail Date 4.	8. 🛛 Examiner's St	atement of Reasons for Allowance					
o. Diological inatorial	9.						
/Michelle Entezari/							
Examiner, Art Unit 2624							

Application/Control Number: 10/565,748 Page 2

Art Unit: 2624

DETAILED ACTION

Response to Arguments

- 1. Applicant's arguments, see pages 4-5 of remarks, filed April 17, 2009 with respect to the 35 USC 112 1st paragraph rejection of claims 11, 13, and 14 have been fully considered and are persuasive. The 35 USC 112 1st paragraph rejection of claims 11, 13, and 14 has been withdrawn.
- 2. Applicant's amendment to claim 11, filed April 17, 2009, along with arguments on pages 5-9 of remarks is sufficient to overcome the 35 USC 103 rejection of claims 11 and dependent claims 12-20. The 35 USC 103 rejection of claims 11-20 has been withdrawn.

Allowable Subject Matter

- 3. Claims 11-20 are allowed.
- 4. The following, is an examiner's statement of reasons for allowance:

Referring to claims 11-20, the prior art taken alone or in combination, does not disclose, teach, or fairly suggest a pixel by pixel energy value comparison between luminance channel and the chrominance channels that is limited to first selected frequencies chosen from underfrequency ranges in order to detect pixels in which color moiré is present when the energy value in the chrominance channel is greater than the

Art Unit: 2624

energy value in the luminance channel. A telephone interview conducted with Joe Miller (Reg. # 61, 748) on July 29, 2009 has lead to an understanding that the energy value is a quantity of measure of the intensity of the pixel, and has support from paragraph 9 of the applicant's specification.

5. A full search of the prior art has yielded the art previously cited by the examiner in the office action sent out September 04, 2008. Examiner additionally cites the following references. US 4524380 (esp. col. 3, line 25 - col. 4, line 10) has a discussion of a low frequency converted chroma signal and a lower side band of the FM luminance signal, and color moiré disturbance and chroma leaks. US 3872498 (exp. Col 3 line 55 – col. 4 line 25) indicates brightness effects of midband chrominance signal components. US 4389665 (esp. col. 4 lines 40-60) discusses a case in which the energy of the luminance is smaller than the carrier chrominance signal, however, there is no indication of using this property in the reduction of color moiré. Additionally, US 6724932 and US 20040125411 yield related material.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 2624

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHELLE ENTEZARI whose telephone number is (571)270-5084. The examiner can normally be reached on M-Th, 7:30am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali can be reached on (571)272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michelle Entezari/ Examiner, Art Unit 2624